

ADDITIONS AND EMENDATIONS TO THE VASCULAR FLORA OF CADDO PARISH, LOUISIANA

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ABSTRACT

The vascular flora of Caddo Parish, Louisiana, is updated. Subsequent field and herbarium research has yielded 25 species new to the parish. Six species are deleted from the flora. The total parish count is now 1424 species, of which 1183 are native and 241 are exotic.

RESUMEN

La flora vascular de la parroquia de Caddo, Louisiana, está puesta al día. La investigación subsiguiente de campo y herbario ha producido 25 especies nuevas para la parroquia. Seis especies se eliminan de la flora. El recuento actual es de 1424 especies, de las que 1183 son nativas y 241 son exóticas.

INTRODUCTION

Since the publication of “An updated, annotated vascular flora of Caddo Parish, Louisiana, with notes on regional phytogeography and ecology” (MacRoberts & MacRoberts 2006), plant collecting in Caddo Parish has continued and species new to the parish have been found. Consultation of recent literature has resulted in the addition of one species. Examination of herbarium collections of species reported for the parish has also continued, resulting in a reevaluation of some taxa. These additions and emendations are given below. We do not address nomenclatural changes.

ADDITIONS TO THE CADDO PARISH FLORA

ALISMATACEAE

Sagittaria subulata (L.) Buchenau, *Raymond* 2167 LSUS, *Reid* 5809 FSU, LSU. Recently reported as new to Louisiana, *Sagittaria subulata* was found on the shoreline of Caddo Lake at Oil City where it was locally abundant (Reid et al. 2008).

APIACEAE

Lilaeopsis carolinensis J.M. Coult & Rose, *Reid* 5978 LSU. Known from southern Louisiana, *L. carolinensis* has recently been found on the banks of Cross Lake near Shreveport.

ARACEAE

Pistia stratiotes L., *Raymond* 2181 LSUS, *Reid* 5976 LSU, *Kalinsky s.n.* LSUS. Water lettuce is spreading in the state and has recently been found in Cross Lake and other sites in Caddo Parish.

ASTERACEAE

Senecio ampullaceus Hook., *Reid* 6020 with *Faulkner* LSU. Thought to be a Texas endemic (Carr 2002) but recently found in southwestern Arkansas and southeastern Okla-

homa (Holmes et al. 2006, Singhurst and Holmes 1998), *Senecio ampullaceus* has recently been collected from xeric sandylands in northern Caddo Parish (Reid et al. 2008).

CALLITRICHACEAE

Callitriche pedunculosa Nutt., *MacRoberts & MacRoberts* 7306 LSU, LSUS. This species was collected from a saline prairie in southern Caddo Parish.

CISTACEAE

Lechea san-sabeana (Buckley) Hodgdon, *MacRoberts & MacRoberts* 7830 LSU, 7834 LSUS. Previously considered a Texas endemic (Carr 2002; Diggs et al. 2006), *Lechea san-sabeana* has recently been found on pimple mounds in saline prairies in Caddo and De Soto parishes (Reid et al. 2008).

CYPERACEAE

Bolboschoenus robustus (Pursh) Sojak, *Reid* 6210 with *Sibley* LSU, LSUS. This species was found in marshy open ground in an inlet of Caddo Lake. In Louisiana and Texas, it is mainly a coastal species of salt marshes and saline areas. There is

another collection from northern Louisiana in Claiborne Parish (Thomas & Allen 1993).

Carex alata Torr., *Reid 6492 with Faulkner and Brimer* LSU, SWSL.

This species was collected in April 2008 from a shrubby marsh, perhaps influenced by beaver, in northern Caddo Parish, where it was growing with abundant *Osmunda regalis* and *Morella cerifera*.

Carex aureolensis Steud., *MacRoberts 1243 and 1281* LSUS, *Haynes 5322* LSU. Collections of *C. frankii* at LSU and LSUS key to this recently described entity (Ford & Reznicek 2002).

Carex bushii Mack., *MacRoberts & MacRoberts 7389* LSU. This species was collected from a saline prairie in southern Caddo Parish and was initially identified as *Carex caroliniana* Schwein.

Eleocharis tenuis (Willd.) Schult., *MacRoberts & MacRoberts 7338* LSU, LSUS. *Eleocharis tenuis* was found in a saline prairie in southern Caddo Parish.

Eleocharis wolfii A. Gray, *Reid 6083* LSUS. *Eleocharis wolfii* is on both the Louisiana rare species list (Louisiana Natural Heritage Program 2009) and Texas list of species-of-concern (Diggs et al. 2006). *Eleocharis wolfii* was collected from wet depressions in a saline prairie in southern Caddo Parish.

Lipocarpha drummondii (Nees) G.C. Tucker, *Thieret 32137* NCU. This species is reported new to Louisiana by Sorrie and LeBlond (2008) based on a Caddo Parish specimen.

Rhynchospora globularis (Chapm.) Small, *MacRoberts & MacRoberts 7428* LSU, LSUS. *Rhynchospora globularis* was found in a saline prairie in southern Caddo Parish.

Scleria muehlenbergii Steud., *Reid 6741* LSU, LSUS. This species was collected from an open seepage area within a power line right-of-way near Mira in northern Caddo Parish.

GENTIANACEAE

Bartonia paniculata (Michx.) Muhl., *Reid 4638* LSU, TEX-LL, *Reid 6405 with Witsell* LSUS. Specimens cited here were collected from the same locality, a forested seep in northern Caddo Parish. Collected in August 2003, *Reid 4638* is referable to *Bartonia paniculata* subsp. *texana* (Correll) K. Mathews, Dunne, E. York, & Struwe, stat. nov. (Mathews et al. 2009). This specimen was determined as *B. texana* Correll (then recognized as a distinct species) by the collector, and a duplicate sent to TEX-LL was annotated by Jason Singhurst as *B. texana*. *Bartonia paniculata* subsp. *texana* is included in Caddo Parish by Mathews et al. (2009) on the basis of the *Reid 4638* specimen at TEX-LL. Collected in October 2007, *Reid 6405* is intermediate between the descriptions of *B. texana* and *B. paniculata* (Correll & Johnston 1970). *Bartonia paniculata* subsp. *paniculata* is expected in Caddo Parish.

HYDROCHARITACEAE

Hydrilla verticillata (L.f.) Royle, *MacRoberts & MacRoberts*

7464b LSUS, *Kalinsky s.n.* LSUS. *Hydrilla verticillata* recently reached Caddo Parish, where it has now spread to many lakes and ponds.

LENTIBULARIACEAE

Utricularia purpurea Walt., *Raymond 2165* LSUS, *Reid 5800* LSU.

Purple bladderwort was found recently to be abundant in Black Bayou Lake at Noah Tyson Park in northern Caddo Parish. This species occurs in coastal areas of Louisiana and Texas and must be a recent arrival to Caddo Parish since Noah Tyson Park is a frequent stop for botanists and the species would have been noticed if it were a long-standing resident.

Utricularia radiata Small, *Reid 6488 with Faulkner and Brimer* LSU. This bladderwort is an aquatic and was found in a beaver-influenced slough dominated by *Nyssa aquatica* in northern Caddo Parish.

Utricularia subulata L., *Reid 6486 with Faulkner* LSU. This species was recently discovered in an open, sandy seep along a stream bisecting a power line right-of-way near Mira in northern Caddo Parish.

LYCOPODIACEAE

Lycopodiella appressa (Chapm.) Cranfill, *MacRoberts & MacRoberts 8334* LSUS. Southern clubmoss was found to be locally common in a small seepage area within a power line right-of-way near Mira in northern Caddo Parish.

NAJADACEAE

Najas minor All., *Kalinsky s.n.* LSUS. This species was recently found on the shoreline of Cross Lake. It is an Old World introduction that is scattered in Louisiana, mostly in the northern part of the state; it is not yet known for East Texas but is expected (Diggs et al. 2006).

SALVINACEAE

Salvinia molesta D.S. Mitch., *Reid 5798 with Jones* LSU, LSUS, *Kalinsky s.n.* LSUS. This is another invasive aquatic plant that apparently reached Caddo Parish very recently, where it was found growing abundantly in Caddo Lake. Since its discovery in the parish in May 2006, it has spread within Caddo Lake and has appeared in Cross Lake (C. Reid, pers. obs.).

XYRIDACEAE

Xyris difformis (Chapm.) var. *difformis*, *Reid 6745, 6746* LSU; *6747, 6749* LSUS. This species occurs in an open seepage area within a power line right-of-way near Mira in northern Caddo Parish.

Xyris laxifolia Mart. var. *iridifolia* (Chapm.) Kral, *Barbour 1099* LSUS. We had previously identified this as *X. caroliniana* Walt.

EXCLUDED FROM THE CADDO PARISH FLORA

ASTERACEAE

Solidago ulmifolia Muhl. ex Willd. is *S. rugosa* P. Mill.

BRASSICACEAE

Cardamine pensylvanica Muhl. ex Willd. is *C. parviflora* L.

CYPERACEAE

Carex frankii Kunth. See *Carex aureolensis* in Additions list.

Carex caroliniana. See *Carex bushii* in Additions list.

Websteria confervoides (Poir.) Hooper. Like others before us,

we misidentified a sterile aquatic species of *Eleocharis* as *Websteria*. Although widely reported from Louisiana (Thomas & Allen 1993), this species probably does not occur in the state (Bruhl 2002).

XYRIDACEAE

Xyris caroliniana Walt. See *Xyris laxifolia* Mart. var. *iridifolia* (Chapm.) Kral under Additions.

NOMENCLATURAL ERROR

CHENOPODIACEAE

Bassia scoparia should be *Kochia scoparia* (L.) Schroder.

DISCUSSION

The Caddo Parish vascular plant count now stands at 1424, of which 1183 are native and 241 are exotic. By Florida standards, Caddo Parish is well collected and exceeds predicted species richness (Williams & Debilica 2008).

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